

REVIEW

FIELD GUIDE TO MISSOURI FERNS, by J. S. Key. Missouri Dept. of Conservation, 220 pp. 1982. \$3.00.—This book was written primarily for non-botanists, and so has attractive line drawings rather than keys for identification of 79 species, varieties, and forms in 28 genera found in Missouri. Introductory material includes fern morphology, collecting, preservation, and habitats. A pictorial guide using small illustrations and based mostly on frond morphology and habitat leads readers to genera. Within the genus, each taxon is illustrated with an attractive habit sketch and detailed drawings of diagnostic characters. The illustrations, plus a brief description, permit identification of the material. Each taxon has the scientific name, with an occasional synonym, the common name, and a statement of habitat and range in Missouri, as well as the description. A glossary, checklist, and an index conclude the volume. The perfect-bound book is available from the Missouri Dept. of Conservation, P.O. Box 180, Jefferson City, MO 65102. Missouri residents should add \$0.12 tax.—*D. B. L.*

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AZOLLA AS A GREEN MANURE: USE AND MANAGEMENT IN CROP PRODUCTION, by T. A. Lumpkin and D. L. Plucknett. Westview Press, Boulder, CO. xx + 230 pp. 1982. \$20.00.—Although the focus of this paperback volume is agronomic, the chapter on botany and ecology (pp. 15–38) is likely to be of interest to taxonomic botanists. Illustrations and a tentative key to the species the authors recognize (*A. nilotica*, *A. pinnata* and var. *imbricata*, *A. microphylla*, *A. filiculoides*, *A. rubra*, *A. mexicana*, and *A. caroliniana*) will be useful in making identifications in this difficult genus. Most of the chapter concerns the morphology, anatomy, and life cycle of *Azolla*, and contains many illustrations. Unfortunately, the reproduction is poor, and so not much detail can be seen in the illustrations. A world-wide map showing the distribution of the *Azolla* species concludes the chapter. The bulk of the book concerns the physiology, nursery culture, field cultivation, pests, and uses in agriculture of *Azolla*. The book is available from Westview Press, 5500 Central Ave., Boulder, CO 80301.—*D.B.L.*